

**ABSTRACT**

A system and a method of controlling transmitter power in a wireless communication system in which user data is processed as a multirate signal having a rate  $N(t)$  and in which the user data signal having rate  $N(t)$  is converted into a transmission data signal having a faster rate  $M(t)$  for transmission. The transmission power is adjusted on a relatively slow basis based on quality of data received by a receiver of the transmitted data. The transmitter power is determined as a function of  $N(t)/M(t)$  such that a change in the data rate in the multiple channels or the rate of the transmission data signal is compensated in advance of a quality of data based adjustment associated with such data rate change. Preferably, the user data signal having rate  $N(t)$  is converted into the transmission data signal having the faster rate  $M(t)$  by repeating selected data bits whereby the energy per bit to noise spectrum density ratio is increased in the transmission data signal.